03050106-01

(Turkey Creek)

General Description

Watershed 03050106-01 (formerly 03050106-020) is located in York and Chester Counties and consists primarily of ***Turkey Creek*** and its tributaries. The watershed occupies 93,725 acres of the Piedmont region of South Carolina. Land use/land cover in the watershed includes: 68.0% forested land, 22.1% agricultural land, 5.5% urban land, 2.0% forested wetland, 1.9% scrub/shrub land, 0.3% water, and 0.2% barren land.

Turkey Creek originates near the City of York, flowing out of Caldwell Lake and accepting drainage from Ross Branch (Lake Carolyn), Dry Fork, Little Turkey Creek (McClures Branch, Lindsey Creek), and Bryson Creek. Further downstream, Blue Branch enters Turkey Creek followed by Rainey Branch (Palmer Branch), Susybole Creek (Little Susybole Creek), Mill Creek (Rodens Creek), and McKelvy Creek. The lower tip of the watershed resides within the Sumter National Forest. There are a total of 192.9 stream miles and 100.5 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

Station #	Type	Class	Description
B-086	S/W	FW	ROSS BRANCH AT SC 49, SW OF YORK
RS-03349	RS03	FW	SUSYBOLE CREEK AT S-46-59, 4 MI NW OF LOWRYS
B-136	W/BIO/INT	FW	TURKEY CREEK AT SC 9, 14 MI NW OF CHESTER

Ross Branch (B-086) – Aquatic life uses are not supported due to turbidity excursions. Recreational uses are not supported due to fecal coliform bacteria excursions.

Susybole Creek (RS-03349) – Aquatic life and recreational uses are fully supported. A very high concentration of cadmium was measured in the 2003 sediment sample.

Turkey Creek (B-136) – Aquatic life uses are partially supported based on macroinvertebrate community data. There is also a significant increasing trend in five-day biochemical oxygen demand. Recreational uses are not supported due to fecal coliform bacteria excursions.

NPDES Program

Active NPDES Facilities

RECEIVING STREAM / ***FACILITY NAME*** / ***PERMITTED FLOW @ PIPE (MGD)***	***NPDES#*** / ***TYPE*** / ***COMMENT***
SUSYBOLE CREEK REA CONSTRUCTION CO./SUSYBOLE PIT #124 PIPE #: 001 FLOW: M/R	SCG730651 MINOR INDUSTRIAL
LITTLE SUSYBOLE CREEK HANSON AGGREGATES SE/LOWRY QUARRY PIPE #: 001 FLOW: M/R	SCG730085 MINOR INDUSTRIAL

SUSYBOLE CREEK TRIBUTARY MACK ESTATES PIPE #: 001 FLOW: 0.02	SC0043095 MINOR DOMESTIC
TURKEY CREEK REA CONSTRUCTION CO./123 TURKEY CREEK MINE PIPE #: 001 FLOW: M/R	SCG730655 MINOR INDUSTRIAL

Nonpoint Source Management Program

Landfill Facilities

LANDFILL NAME ***FACILITY TYPE***	***PERMIT #*** ***STATUS***
CARTERS LANDSCAPE & FARMS INDUSTRIAL	---------- INACTIVE
CITY OF YORK COMPOSTING	461004-3001 INACTIVE

Mining Activities

MINING COMPANY ***MINE NAME***	***PERMIT #*** ***MINERAL***
REA CONSTRUCTION CO. SAND PIT #123 - TURKEY CREEK MINE	0177-91 SAND
REA CONSTRUCTION CO. SAND PIT #124 - SUSYBOLE CREEK MINE	0180-23 SAND
HANSON AGGREGATES SE INC. LOWRYS QUARRY	0759-91 GRANITE

Water Quantity

WATER USER ***STREAM***	***REGULATED CAP. (MGD)*** ***PUMPING CAP. (MGD)***
CITY OF YORK CALDWELL LAKE	1.0 4.1
CITY OF YORK ROSS BRANCH TRIBUTARY - LAKE CAROLYN	2.2 4.0

Growth Potential

There is a low to moderate potential for growth in this watershed, which contains portions of the City of York and the Towns of Lowrys, Sharon, and McConnells. The City of York is located at the top of the watershed, and extends water and sewer service in and around the city. Residential and commercial development is expected to grow in these areas. The Sumter National Forest effectively excludes the lower tip of the watershed from development.

Watershed Protection and Restoration Strategies

Total Maximum Daily Loads (TMDLs)

A TMDL was developed for SCDHEC and approved by EPA for fecal coliform bacteria in **Ross Branch** at water quality monitoring site ***B-086***. There are no facilities that discharge into Ross Branch that have fecal coliform limits in their NPDES permits. There are no Municipal Separate Storm Sewer Systems (MS4) in the Ross Branch watershed. Possible sources of fecal coliform bacteria in Ross Branch identified in the TMDL include leaking sewers, failing onsite wastewater disposal systems, land application of manure, cattle watering in the creek, and pet and wildlife wastes. The TMDL specifies a reduction in the load of fecal coliform bacteria into Ross Branch of 99% in order for the creek to meet the recreational use standard.

A TMDL was also developed for SCDHEC and approved by EPA for fecal coliform bacteria in **Turkey Creek** at water quality monitoring site ***B-136***. No currently active facilities that have fecal coliform limits in their NPDES permits discharge into the creek. Nor are there any Municipal Separate Storm Sewer System (MS4) designated areas in the Turkey Creek watershed. Possible sources of fecal coliform bacteria in Turkey Creek identified in the TMDL include failing onsite wastewater disposal systems, land application of manure, cattle watering in the creek, and wildlife wastes. The TMDL specifies a reduction in the load of fecal coliform bacteria into Turkey Creek of 39% in order for the creek to meet the recreational use standard.

Funding for TMDL implementation activities is currently available. For more information, see the Bureau of Water web page www.scdhec.gov/water or call the Watershed Program at (803) 898-4300.